

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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REPORT NO. 3548

MISSOURI-KANSAS-TEXAS RAILROAD COMPANY  
OF TEXAS  
AND  
TEXAS AND NEW ORLEANS RAILROAD COMPANY

IN RE ACCIDENT

AT EUREKA, TEX., ON

NOVEMBER 20, 1953

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SUMMARY

Date: November 20, 1953

Railroads: Missouri-Kansas-Texas : Texas and New Orleans  
of Texas

Location: Eureka, Tex.

Kind of accident: Side collision

Equipment involved: Track motor-car and : Engine with  
trailer cars

Engine number: : Diesel-  
electric  
unit 30

Consist: : 8 cars

Estimated speeds: Standing : 12 m. p. h.

Operation: Interlocking

Tracks: Single; tangent; : Single; 0°17'  
0.06 percent curve; 0.08  
ascending grade percent  
northward descending  
grade east-  
ward

Weather: Clear

Time: 12:50 p. m.

Casualties: 2 killed; 2 injured

Cause: Failure to operate track motor-car in  
accordance with rules governing move-  
ments over railroad crossings



INTERSTATE COMMERCE COMMISSION

REPORT NO. 3548

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS  
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

MISSOURI-KANSAS-TEXAS RAILROAD COMPANY OF TEXAS  
AND  
TEXAS AND NEW ORLEANS RAILROAD COMPANY

January 27, 1954

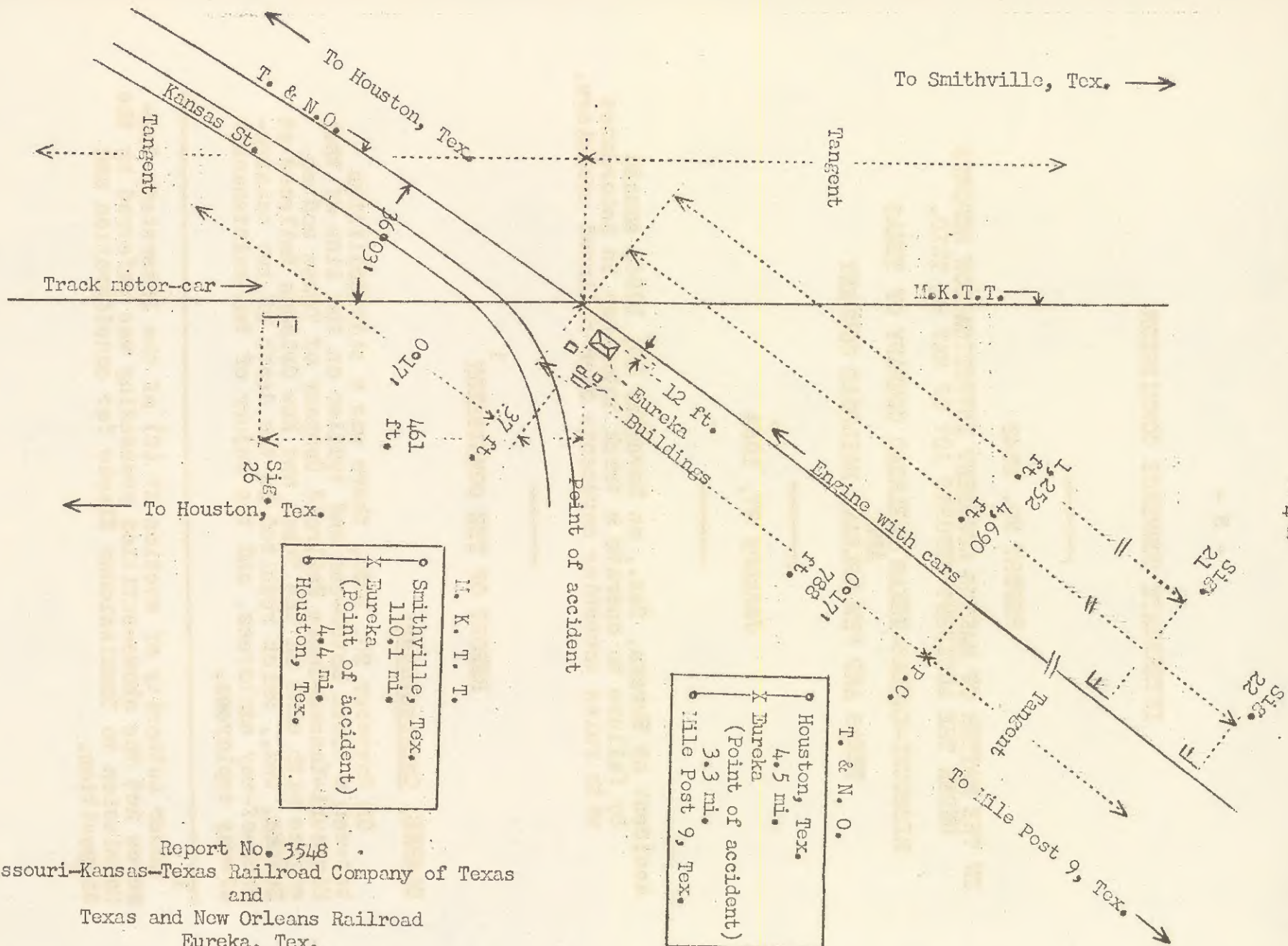
Accident at Eureka, Tex., on November 20, 1953, caused  
by failure to operate a track motor-car in accordance  
with rules governing movements over railroad crossings.

<sup>1</sup>  
REPORT OF THE COMMISSION

CLARKE, Commissioner:

On November 20, 1953, there was a side collision between a track motor-car and trailer on the line of the Missouri-Kansas-Texas Railroad Company of Texas and an engine with cars on the Texas and New Orleans Railroad at Eureka, Tex., which resulted in the death of two maintenance-of-way employees, and the injury of two maintenance-of-way employees.

<sup>1</sup>  
Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



Report No. 3548  
 Missouri-Kansas-Texas Railroad Company of Texas  
 and  
 Texas and New Orleans Railroad  
 Eureka, Tex.  
 November 20, 1953



Location of Accident and Method of Operation

This accident occurred at the intersection of the line of the Missouri-Kansas-Texas Railroad Company of Texas, hereinafter referred to as the M.K.T.T., and the Texas and New Orleans Railroad, hereinafter referred to as the T.& N.O., at Eureka, Tex. The crossing is located on that part of the South Texas Division of the M.K.T.T. extending between Houston and Smithville, Tex., 114.5 miles, and on that part of the Houston Terminals of the T.& N.O. extending between Mile Post 9, 3.3 miles west of Eureka, and Houston, 4.5 miles east of Eureka. On the M.K.T.T. Eureka is 4.4 miles north of Houston. By compass directions the M.K.T.T. extends from east to west in the vicinity of the point of accident. The T.& N.O. extends from northwest to southeast and crosses the M.K.T.T. at an angle of  $36^{\circ}03'$ . By timetable directions a north-bound movement on the M.K.T.T. approaches the crossing to the left of an east-bound movement on the T.& N.O. Timetable directions are used in this report. In the vicinity of the point of accident the M.K.T.T. is a single-track line, over which trains are operated by timetable, train orders, and an automatic block-signal system. The track is tangent throughout a distance of over 1 mile immediately south of the crossing and a considerable distance northward. The grade is 0.06 percent ascending northward at the crossing. West of the crossing the T.& N.O. is a single-track line, over which trains are operated by timetable, train orders, and an automatic block-signal system. From the west there are, in succession, a tangent over 5,000 feet in length and a  $0^{\circ}17'$  curve to the left 788 feet to the crossing and a considerable distance eastward. The grade is 0.08 percent descending eastward at the crossing.

Movements over the crossing are governed by interlocking signals. Semi-automatic signal 26, governing north-bound movements on the M.K.T.T., is located 461 feet south of the crossing. Semi-automatic signals 22 and 21, governing east-bound movements on the T.& N.O., are located, respectively, 4,690 feet and 1,252 feet west of the crossing.

The interlocking machine is located on the second floor of a two-story frame building. The building is to the right of north-bound movements on the M.K.T.T. and to the left of east-bound movements on the T.& N.O. It is 16 feet 6 inches long and 14 feet 6 inches wide. The side of the building is 12 feet distant from the center-line of the T.& N.O. track and parallel to it, and the end is 37 feet from the crossing. Four other small buildings are located within the same angle of the intersection and adjacent to this building.



Rules governing the use and operation of track motor-cars on the M.K.T.T. read in part as follows:

96. Special care must be exercised at interlockers to avoid accidents due to towerman shifting points.

\* \* \* Motor cars must be stopped clear of the crossing and understanding had with towerman that no train is approaching before passing over the crossing.

The maximum authorized speeds were 15 miles per hour for the track motor-car and 18 miles per hour for the engine with cars.

#### Description of Accident

M.K.T.T. track motor-car 100163, occupied by a maintenance-of-way foreman and six employees and towing a trailer loaded with bridge timbers and other material, departed north-bound, about 12:30 p. m., from a point approximately 4,600 feet south of the crossing at Eureka. It entered the main track of the M.K.T.T. at a switch 2,447 feet south of the crossing, proceeded northward, and stopped with the front end on the crossing. Immediately afterward it was struck by an engine with cars moving on the line of the T. & N.O.

An east-bound T. & N.O. switching movement, consisting of Diesel-electric unit 30 and eight cars, passed signal 21, which indicated Proceed, and while moving at an estimated speed of 12 miles per hour it struck track motor-car 100163 at the crossing.

Diesel-electric unit 30 stopped with the front end 407 feet east of the point of accident. The front end of the unit was slightly damaged. The track motor-car was moved eastward to the point at which the Diesel-electric unit stopped. It was demolished. The trailer was derailed and stopped on the track structure of the M.K.T.T. track.

The foreman and the operator of the track motor-car were killed. Two other occupants of the track motor-car were injured.

The weather was clear at the time of the accident, which occurred at 12:50 p. m.

Track motor-car 100163 was of the chain-drive type and was powered by an 8-cylinder 100-horsepower engine. It weighed 2,200 pounds and had seating capacity for 10 persons. It was equipped with four-wheel brakes and with a safety railing at each end. The trailer was of the four-wheel type and weighed



860 pounds. It was not equipped with brakes. Both the track motor-car and the trailer were insulated to prevent the shunting of track circuits. At the time of the accident the trailer was loaded with bridge timbers and other material having a total weight of about 3,200 pounds. The trailer was towed by a rope which was attached to the trailer, wrapped around the safety railing at the rear of the track motor-car, and held by an occupant of the track motor-car. The over-all length of the track motor-car and the trailer and its cargo was approximately 24 feet.

During the 30-day period preceding the day of the accident the average daily movement on the T. & N.O. over the crossing was 17.4 trains.

#### Discussion

When the accident occurred the maintenance-of-way force was en route to a bridge located about 3 miles north of Eureka. Surviving members of the force said that before the north-bound movement was started the foreman informed them that he would obtain a line-up of train movements from the operator. When the foreman returned, he and the other employees boarded the track motor-car and proceeded northward. The surviving employees said that the foreman usually issued specific instructions as to which employees were to maintain a lookout in each direction, but on this occasion he did not issue such instructions. After the track motor-car entered the main track the speed was increased to about 10 miles per hour and then was decreased to about 4 miles per hour as the car approached and passed a rail-highway grade crossing at Kansas Street, 130 feet south of the T. & N.O. crossing at Eureka. This speed was maintained until the car was closely approaching the T. & N.O. crossing. The surviving employees said they were unaware of the approach of Diesel-electric unit 30 until the track motor-car was about to enter the crossing. At that time several of the employees called a warning, and all of them attempted to alight from the car. Two of the employees said that the operator of the track motor-car applied the brakes of the car immediately after they observed the approaching Diesel-electric unit, and one of them said that the track motor-car had stopped on the crossing when the collision occurred.



As Diesel-electric unit 30 was approaching Eureka it was moving in backward motion and pulling eight cars. The crew was engaged in performing switching service at various industries in the vicinity of Eureka, and the air-brake system of the cars had not been charged. The engineer had inspected the brakes of the Diesel-electric unit when he took charge of the unit, and the brakes had functioned properly when used. The yard conductor was on the platform at the east end of the Diesel-electric unit, the enginemen and two yard brakemen were in the control compartment, which was at the east end of the unit, and one yard brakeman was on the sixth car. The speed was about 12 miles per hour. The engineer used the pneumatic horn to call for the route through the interlocking and to acknowledge the Proceed indication of signal 21. The yard conductor said that as the Diesel-electric unit was closely approaching the interlocking station he observed the track motor-car moving toward the crossing. He called a warning to the engineer. At approximately the same time, the engineer observed the track motor-car. He immediately made an emergency application of the brakes and opened the sander valve. The engineer said he thought that the track motor-car continued to move forward until the collision occurred. When the collision occurred a can of cresote on the track motor-car was spilled upon the track. The enginemen said that the wheels of the Diesel-electric unit were sliding after the unit passed the crossing, and they thought that because of cresote on the rails the unit moved farther than it normally would before coming to a stop.

The operator at Eureka said that none of the occupants of the track motor-car communicated with him before the accident occurred. He lined the route for the T. & N.O. movement about 2 minutes before the accident occurred, and he was not aware that the track motor-car had entered the interlocking limits until he glanced out the window and saw it passing the interlocking station. He thought the car was about 10 feet distant from the crossing when he first saw it.

When a north-bound M.K.T.T. track motor-car reaches a point near the north side of Kansas Street, the occupants can obtain a view of an approaching east-bound T. & N.O. train at a point about 210 feet west of the crossing. After a track motor-car passes this point, the occupants' view of an approaching east-bound train is obstructed by buildings and vegetation until the car passes the interlocking station or the train reaches a point in the immediate vicinity of the interlocking station.



The operator at Eureka said that it was not unusual for M.K.T.T. track motor-cars to pass the crossing without his permission. He said that it was the usual practice for the operators of track motor-cars to stop the cars before entering the crossing and wait until a man had walked ahead to see that no conflicting movement was approaching. The rules of the M.K.T.T. provide that a track motor-car must not be operated over a crossing within interlocking limits until the operator of the track motor-car has ascertained from the operator at the interlocking that no train is approaching. If these rules had been observed in the instant case, this accident would have been averted.

Cause

This accident was caused by failure to operate a track motor-car in accordance with rules governing movements over railroad crossings.

Dated at Washington, D. C., this twenty-seventh day of January, 1954.

By the Commission, Commissioner Clarke,

(SEAL)

GEORGE W. LAIRD,  
Secretary.



